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September 6, 1996

BY HAND DELIVERY

Mr. William F. Caton
Acting Secretary
Federal Communications Commission
1919 M Street, N.W., Room 222
Washington, D.C. 20554

Re: Guidelines for Evaluating the Environmental Effects of Radiofrequency Radiation, ET Docket No. 93-62

Dear Mr. Caton:

Transmitted herewith for filing with the Commission on behalf of the Electromagnetic Energy Association, are an original and eleven copies of its Petition for Reconsideration.

Should there be any questions regarding this matter, please communicate with this office.

Very truly yours,

John I. Stewart, Jr.

Enclosures

cc: Honorable Reed Hundt, Chairman
Honorable James H. Quello
Honorable Rachelle B. Chong
Honorable Susan Ness

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
Guidelines for Evaluating the Environmental Effects of Radiofrequency Radiation	)	ET Docket No. 93-62

PETITION FOR RECONSIDERATION

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September 6, 1996

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SUMMARY

The Electromagnetic Energy Association ("EEA"), a coalition of companies and associations representing a broad spectrum of communications services, consumer products, and industry applications, ranging from broadcasting to cellular, PCS and other land mobile services, requests the Commission to reconsider its decision to grant only partial preemption in response to the comments of numerous parties and EEA's Petition for Further Notice of Proposed Rulemaking in this proceeding.

It is critical that the Commission take this opportunity, as it adopts a new federal RF energy standard applicable to all Commission-authorized transmitters, to ensure that that standard will be applied consistently across the entire country and across the entire range of services being offered in this new era of digital communications. The evidence in the record of this proceeding supports preemption of inconsistent state and local RF regulation for all transmitters, not just some. Indeed, there is no appropriate basis for differentiating among Commission licensees, and the Commission has offered none. Congress has expressly confirmed the necessity of federal preemption in this area by enacting Section 704 of the Telecommunications Act of 1996, focusing in particular on personal wireless services. The same necessity compels preemption with respect to other Commission-authorized RF transmitters as well.

Indeed, the Commission's approach to nationwide licensing of new non-

personal wireless communications services such as DTV and LMDS makes it even more critical to preempt inconsistent state and local regulation. Having followed Congress's direction and imposed preemption with respect to personal wireless service facilities, the Commission should now modify Section 1.1307(e) of its Rules to apply preemption to all Commission-authorized facilities.

EEA also requests that the Commission reconsider its decision to adopt a hybrid RF exposure standard, and instead adopt the 1992 ANSI standard in its entirety. In any event, the Commission should follow a process of open participation in developing revised OET Bulletins to implement its new RF standard.

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
Guidelines for Evaluating the Environmental Effects of Radiofrequency Radiation	)	ET Docket No. 93-62

To: The Commission

PETITION FOR RECONSIDERATION

Pursuant to Section 1.429 of the Commission's Rules, the Electromagnetic Energy Association, by its attorneys, requests that the Commission reconsider and modify its Report and Order issued in the above-captioned proceeding on August 1, 1996 (the "Report & Order").[1] In that decision, the Commission improperly granted only partial preemption of state and local laws that are inconsistent with its federal RF guidelines. It also failed to give due consideration to the overwhelming weight of evidence supporting adoption of the ANSI/IEEE C95.1-1992 standard (the "1992 ANSI standard").

The Electromagnetic Energy Association ("EEA") is a coalition of companies and trade associations representing a broad spectrum of communications

[1] A summary of the Report & Order was published on August 7, 1996, at 61 Fed. Reg. 41006. Hence, this Petition is timely under Sections 1.429(d) and 1.4(b)(1) of the Commission's Rules.

businesses, consumer products and industrial applications, from broadcasting to cellular to the full range of other land mobile communications services, such as paging, specialized mobile radio, "broadband" and "narrowband" personal communications services and two-way dispatch radio services.[2] EEA's principal objective is the advancement of responsible and rational public policy regarding electromagnetic energy.

EEA and its members have participated actively in this proceeding, filing comments and reply comments as well as an extensively substantiated Petition for Further Notice of Proposed Rulemaking on the issue of federal preemption. EEA respectfully urges the Commission to modify its Report and Order to apply its preemption rule (§1.1307(e)) to all facilities subject to its RF exposure guidelines. EEA also requests that the Commission adopt the 1992 ANSI standard in its entirety.

I. THE COMMISSION'S DECISION TO PREEMPT INCONSISTENT STATE AND LOCAL REGULATION WITH RESPECT TO SOME LICENSED RF TRANSMITTERS, BUT NOT OTHERS, CANNOT BE JUSTIFIED.

As the Commission relates in its Report and Order, numerous parties filed comments urging it to preempt state and local regulation to the extent it was

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[2] EEA was first formed in 1984 as the "Electromagnetic Energy Policy Alliance." It has taken an active role in promoting informed decisionmaking on public policy relating to the safe use of electromagnetic energy, as to which its members have extensive experience and expertise. A list of members of EEA is attached as Exhibit A.

inconsistent with the RF exposure standards ultimately adopted in this proceeding. Report & Order at ¶165 & n.200. On December 22, 1994, EEA filed a Petition for Further Notice of Proposed Rulemaking, in which it explained the legal basis for such preemption and provided numerous examples, drawn from the comments of parties in the proceeding and from independent sources, of state and local regulation that was unduly impeding the construction and operation of FCC-authorized transmission facilities. See id. & n.201.

In only a few short paragraphs, the Commission granted part but not all of the relief EEA and others had sought. First, it announced that it was adopting a rule preempting state and local regulation based on the environmental effects of RF emissions by "personal wireless services" facilities. Id. at ¶ 166; 47 CFR § 1.1307(e). Then, noting that Section 704 of the Telecommunications Act of 1996 did not explicitly cover broadcast or other types of facilities, it held, without explanation, that "[a]t this point, it does not appear that the number of instances of state and local regulation of RF emissions in non-personal wireless services is large enough to justify considering whether or not they should be preempted." Report & Order at ¶ 167. Because it assumed the instances it had been presented with involved "bona fide health and safety objectives," it declined to preempt such regulation. Id.

The Commission then asserted that the RF regulations it was adopting "represent the best scientific thought and are sufficient to protect the public health." Id. at ¶ 168. It stated that it "expects" state and local governments will

see the wisdom of conforming their regulations to its own, and therefore that no inconsistencies will develop. But if its "expectations prove to be misplaced," the Commission said, it will consider new evidence parties may present in the future about the need for preemption, which should be accompanied by a showing of the "legal basis" for such preemption. Id.

A. The Commission Was Presented in the Record of this Proceeding With a Substantial Basis for the Adoption of a Preemption Rule Applicable to All RF Transmitters.

The record evidence presented by EEA and others requesting preemption covered all types of transmitters, not just personal wireless services. As described above, EEA is an organization that encompasses a wide range of businesses and entities that are united by a common purpose. Despite the diversity of their activities, they all are involved in the transmission or use of RF energy. All are affected by the adoption of RF exposure limits, whether by the Commission or by a state or locality.

Accordingly, EEA's Petition for Further Notice of Proposed Rulemaking presented evidence of restrictive state and local regulations that affected all types of FCC-authorized facilities, without differentiating among them. Indeed, the local ordinances the Petition listed generally involved standards applicable to all RF transmitters, regardless of the communications service being provided. The Petition provided specific cases of local prohibitions or burdensome restrictions on antenna placement that involved both broadcast stations and "personal wireless

services." To the extent the evidence presented in the EEA Petition was service-specific at all, roughly half involved non-personal wireless service facilities. Thus, the record of instances supporting preemption of inconsistent state and local regulation does not provide any basis for differentiating among types of FCC authorized facilities.

EEA also spelled out clearly the legal basis for preemption by the Commission. It has the power, when "acting within the scope of its congressionally delegated authority," to preempt state or local regulation which conflicts with federal law and "stands as an obstacle to the accomplishment and execution of the full objectives of Congress." Louisiana Public Service Comm'n v. FCC, 476 U.S. 355, 368-69 (1986) (*citing* Hines v. Davidowitz, 312 U.S. 52 (1941)). As the Commission has acknowledged, it has not only the authority but the statutory obligation to adopt regulations regarding the environmental effects of RF energy emissions. See Report & Order at ¶5; Responsibility of the FCC to Consider Biological Effects of Radiofrequency Radiation, 100 FCC 2d 543, 552 (1985).

Indeed, the Commission properly assumed without discussion that it has legal authority to preempt state and local regulation with respect to RF transmitters. See Report & Order at ¶166. The fact that Congress directed preemption with respect to "private wireless services" confirms the FCC's authority to preempt all state and local regulation inconsistent with its RF energy regulations, and reflects Congress's recognition of the factual basis for concluding

that such regulation will impede the implementation of important communications policy objectives. The record evidence presented by EEA and others thus compels complete, not partial, preemption.

B. There is No Rational Basis, and the Commission Provided No Explanation, For Differentiating Between Personal Wireless Service Facilities and Other RF Transmitters in Preempting Unduly Restrictive State and Local Regulation.

The social, technological and economic benefits of future advancements in communications services -- including Digital Television, Digital Audio Broadcasting, Instructional Television Fixed Service, and Local Multipoint Distribution Service, no less than PCS and Cellular services -- cannot be realized if the construction of FCC-authorized facilities is delayed or precluded altogether by state or local regulation applying RF energy standards that are inconsistent with those adopted by the Commission. Yet the Commission provides no explanation for distinguishing among these services in adopting only partial preemption.

From the perspective of health and safety, there should be no distinction among various transmitters emitting RF energy (other than technically justified differences in RF limits, which are already accommodated by the proper RF rules). Non-preempted services are interspersed in the U.S. Table of Frequency Allocations among those for which preemption was granted. If the Commission believes that its standards are "based on the best scientific thought and are sufficient to protect the public health," Report & Order at ¶168, it should preclude

inconsistent regulations for all parts of the spectrum, not just some.

The countervailing concern in the preemption inquiry -- avoiding undue interference with state and local autonomy -- is eliminated, or at least much diminished, now that those governments are already subject to preemption for a broad range of RF transmitters. For example, consider a proposal to site an antenna at a particular location, in compliance with the Commission's RF exposure guidelines. Suppose also that the local government, pursuing what it considered bona fide health and safety objectives, applied stricter RF exposure standards that would preclude placement of such an antenna at the site. If the antenna would be used to offer ITFS or LMDS service, the locality could presumably prevent it from being placed there. But if a cellular operator then proposed to locate an antenna in the same location, the local government could not refuse, even if the perceived health effects on its citizens were identical. Thus, given the intrusive effect that has necessarily already been imposed by the Commission's partial preemption, and given that it applies to personal wireless services, which will be siting tens of thousands of antennas in the coming years, the additional impact, if any, of adopting complete preemption will be small. This is especially so if, as the Commission hopes, state and local governments follow the same RF standards the Commission ultimately adopts. Indeed, there may be no practical way for a locality to distinguish in its regulations among preempted and non-preempted transmitters.

The fact that Section 704 of the Telecommunications Act of 1996 addressed

only "personal wireless services" does not preclude broader preemption. For example, the Commission has already determined that it may implement new requirements under the Telecommunications Act by applying them to broader classes of carriers than were specifically mandated by the Act, particularly where doing so will facilitate the promotion of nationwide communications policy objectives. See Telephone Number Portability, 11 FCC Rcd 8352, 8431-32 (1996). Section 704, while specific to personal wireless services, does not at all preclude broader preemption by the Commission. And the Supreme Court has held that even if an "express definition of the pre-emptive reach of a statute" could be read as supporting an inference that Congress did not intend to preempt further, a court may still find implied preemption of a broader area based upon analysis of the potential conflict between state and federal law. Freightliner Corp. v. Myrick, 115 S.Ct. 1483, 1488 (1995).

Finally, the federal communications policies that would be impeded by inconsistent state and local RF regulation are no less important than those favoring the fostering of personal wireless services. Indeed, the Commission's prior focus on case-by-case resolution of conflicts with state or local RF regulation, see National Association of Broadcasters, 5 FCC Rcd 486 (1990), is no longer defensible in the era of digital communications, when the Commission is adopting nationwide licensing schemes for digital broadcast licenses.

For example, the Commission recently released its nationwide plan for implementation of DTV. Advanced Television Systems and Their Impact upon the

Existing Television Broadcast Service (Sixth Further Notice of Proposed Rule Making), FCC 96-317 (released Aug. 14, 1996). The proposal contemplates an initial simultaneous allocation of digital channels for all present NTSC licensees, based on a critical set of complex and interdependent "fit" analyses. If the Commission were to allow a checkerboard of state and local RF regulation that exceeded the Commission's own standards to preclude the construction of new DTV facilities at the sites used by the Commission for purposes of the allocation, the transition to the new digital environment could be severely impaired. Waiting to address the issue until after some portion of the new facilities are already built will only compound the problem.

Similarly, the Commission last year adopted a nationwide plan governing the licensing of available MMDS and ITFS frequencies. Amendment of Parts 21 and 74 of the Commission's Rule with Regard to Filing Procedures in the Multipoint Distribution Service and Instructional Television Fixed Service, 10 FCC Rcd 9589 (1995), on recon., 1 CR 1 (1995). See also Request for Declaratory Ruling on the Use of Digital Modulation by Multipoint Distribution Service and Instructional Television Fixed Service Stations, FCC 96-304 (released July 10, 1996). The continued growth of these services is important in both encouraging competition in the video services industry and facilitating "distance learning" for our citizens. Yet they are unprotected from inconsistent state and local regulation by the Commission's policy of partial preemption, while personal wireless services are federally protected.

The Commission has also recently proposed rules governing the nationwide licensing of LMDS frequencies. Rulemaking to Amend Parts 1, 2, 21 and 25 of the Commission's Rules to Redesignate the 27.5-29.5 GHz Frequency Bands, to Reallocate the 29.5-30.0 GHz Frequency Band, to Establish Rules and Policies for Local Multipoint Distribution Service and for Fixed Satellite Service (Third Report and Order and Fourth Notice of Proposed Rule Making), 11 FCC Rcd 53 (1995). It is contemplated that at least some uses of the LMDS spectrum would resemble cellular operations, in that they will involve the installation of numerous "cell site" transmitters throughout a wide metropolitan area, but they would offer services that do not fall within the definition of "personal wireless services." To allow some localities to prevent the rollout of LMDS service based on more restrictive RF standards than the Commission has determined to be appropriate, while protecting the siting of cellular and PCS transmitters with similar RF characteristics in the same localities, cannot be justified.

From the perspective of a scientific and technical evaluation of potential exposure, these kinds of unjustified distinctions make no sense in a digital environment. By not applying consistent preemption, the Commission would create a situation where two transmitters, operating within the same frequency range (e.g., 2 GHz for PCS vs. 2.5 GHz for ITFS and MDS), both transmitting digital data only, would be subject to inconsistent regulation. The transmitter providing personal wireless service would only have to resolve the Commission's concerns. The transmitter providing broadcast service would be required to

resolve the Commission's and a state or local government's concerns. This is not only unfair but unjustified and unnecessary. Failure to adopt complete rather than partial preemption will thwart the achievement of important federal policies.

II. THE COMMISSION'S DECISION TO ADOPT THE NCRP STANDARD RATHER THAN THE 1992 ANSI STANDARD IGNORED THE OVERWHELMING WEIGHT OF THE SCIENTIFIC EVIDENCE.

As the Commission has recognized, it has an independent and nondelegable duty under the National Environmental Policy Act of 1969 (NEPA) to adopt guidelines to assess the environmental impact of the facilities and activities it authorizes. Responsibility of the FCC to Consider Biological Effects of Radiofrequency Radiation, 100 FCC 2d 543, 546-47 (1985). In meeting its statutory duty to adopt "technically sound and scientifically supportable" RF exposure guidelines, the Commission has concluded that it lacks the scientific expertise to develop its own standards, and has relied instead on its "expertise and authority to *recognize* technically sound standards promulgated by reputable and competent organizations such as ANSI." Id. at 551 (emphasis in original).

In the instant Report and Order, however, the Commission has failed to give due weight to the technical and scientific evidence in the record. Indeed, in adopting NCRP rather than ANSI/IEEE standards for a significant part of its exposure guidelines, the Commission explicitly overrides the recommendations of prominent scientists who were uniquely qualified to render comparative assessments of the two sets of standards. As it expressly concedes, "Dr. Arthur W.

Guy, former Chairman of both ANSI/IEEE and NCRP committees on RF exposure" presented comments that "it would be a mistake for the FCC to adopt the older 1986 NCRP standard at this time considering the fact that newer and more advanced standards have been developed since the publication of the NCRP standard." Report & Order at ¶ 27 (emphasis supplied). Dr. Guy participated in the IEEE's development of those newer and more advanced standards (i.e., the 1992 ANSI standard), and urged that they be adopted.

The same conclusion was supported by comments from (1) Prof. Om Ghandi, the Co-Chair of Subcommittee 4 of the IEEE Standards Coordinating Committee 28 (SCC28), the subcommittee that developed the 1992 standard; (2) Dr. Eleanor R. Adair, the co-chair with Prof. Ghandi of Subcommittee 4, the Chair of the IEEE Committee on Man and Radiation (COMAR), which includes eminent scientists and engineers working in the field of nonionizing radiation, and an Advisory Member of the NCRP Committee; and (3) Dr. C.K. Chou, a consultant to the NCRP Committee who was also an active member of Subcommittee 4 when the standards were adopted, and who has now succeeded Dr. Adair as Chair of COMAR. Of this uniquely qualified group of scientists, all supported the adoption of the 1992 ANSI standard rather than the 1986 NCRP standard or a hybrid.

The Commission chose also not to follow the recommendation of the U.S. Department of Defense to adopt the ANSI standard. For more than twenty years, DOD has conducted an extensive research program on the potential effects of exposure to radio-frequency energy. In its own laboratories, and in its support of

exposure assessment and bioelectromagnetic work in other laboratories, particularly at universities, DOD has significantly advanced scientific knowledge of exposure effects.

Besides adopting a standard based on something other than the newest and most advanced available research, the Commission's hybrid approach of adopting NCRP exposure guidelines, rather than ANSI/IEEE, results in the loss of the rationale underlying the standard itself. It also requires the development of new measurement procedures rather than relying on the ANSI/IEEE recommendations. And while the NCRP standards are adopted by an ad hoc committee process that provides no continuity, the IEEE committee charged with development of the RF standard is ongoing, continuously reviewing the standard in light of the most recent scientific developments, and is available for interpretations of the standard when needed. See, e.g., Access to Telecommunications Equipment and Services by Persons With Disabilities, 11 FCC Rcd 8249, 8285-87 (1996) (adopting ANSI/IEEE technical standard and anticipating future changes in rules to reflect continuing development of industry standard).

By failing to adopt the 1992 ANSI standard in its entirety, the Commission has failed to recognize the important differences between magnetic and electric fields at low frequencies. The result is needless restrictions on AM broadcast stations. Failure to adopt the 1992 ANSI standard means also that no guidance is provided for frequencies between 100 and 300 GHz, where the laser standards take over. These higher frequencies are likely to be of increasing importance as

time passes and industry learns how better to use them. Already, frequencies in excess of 50 GHz are in use.

For these reasons, and based on the overwhelming weight of the record evidence, EEA respectfully urges that the Commission reconsider its decision and adopt the 1992 ANSI standard in its entirety.

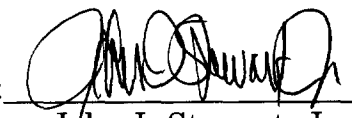
Finally, adoption of the hybrid standard in the Report and Order presents a number of potential compliance problems for regulated industries. Specifically, there is a lack of technical clarity, definitions, and prescribed acceptable techniques for such factors as spatial measuring and transiency. EEA urges the Commission to establish an open consultative the process for revising and issuing OET Bulletins to implement the new RF standard, so that these issues can be addressed and resolved.

CONCLUSION

For the reasons stated above, EEA respectfully urges the Commission to preempt state and local regulation of RF energy emissions that is inconsistent with the Commission's own regulations for all FCC-authorized transmission facilities rather than only for personal wireless service facilities. EEA also urges the Commission to adopt the 1992 ANSI/IEEE standard in its entirety, and to provide for open participation in the process of developing OET Bulletins implementing the new RF standard.

Respectfully submitted,

ELECTROMAGNETIC ENERGY ASSOCIATION

By: 

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September 6, 1996

EXHIBIT A

EEA FACT SHEET

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